IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

App. No.	:	10/707,104	Confirmation No. 1103
Applicant	:	Shinji Takemoto	
Filed	:	November 20, 2003	
T.C./A.U.	:	3745	
Examiner	:	Igor Kershteyn	
Docket No.	:	ND-US030856 (18.058-AG)	
Customer No.	:	29453	

Honorable Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Interview Summary Pursuant to 37 C.F.R. § 1.133(b)

Because reconsideration is being requested in view of the telephone interview conducted on May 16, 2006 with the Examiner by Applicant's undersigned representative, on Applicant's behalf the following summary is submitted, further to the interview summary provided by the Examiner on May 31, 2006.

1) A proposed claim 1 was submitted to the Examiner for discussion. It was recognized that the proposed amendments would apply likewise to independent claims 7 and 13 as well.

2) The specific prior art discussed was: U.S. Pat. Nos. 4,603,271 (Maruyama et al.), 1,313,460 (Branson), 6,503,060 (Kamada et al.—particularly Fig. 4), and 6,764,277 (Somahara et al.—particularly Fig. 4).

3) Among the principal proposed amendments discussed, those of a substantive nature were:

   i) Amendments to the recitation of the impeller to clearly set forth the generation of a spiral airflow defining an airflow vector; and
   ii) Amendments to the recitation of the guard-plate ribs—in particular, reciting the ribs as intersecting groups whose lines of intersection

are inclined to follow the vector defined by the spiral airflow coming out of the impeller.

4) In a preparatory discussion with Applicant's undersigned representative to better enable him to draft a specific amendment proposal to discuss in the interview, the Examiner stated that the amendments made in response to the final Office action added language that was too functional to distinguish over the prior art. Applicant's representative explained an initial proposal by Applicant for the above amendments i) and ii). The Examiner responded that Applicant's proposed amendments would not be sufficient to overcome the prior art, and kindly suggested that the guard-plate recitation should be amended to distinctly set forth the way in which the guard-plate ribs in each meshwork section are intersected.

   In the preparatory discussion, Figs. 3, 5 and 4/8 were focused on. In the formal interview, Figs. 11 and 12 were focused on in addition to Figs. 4/8.

   In the formal interview, Applicant's undersigned representative explained how making the above amendments i) and ii) is toward distinguishing that the guard-plate rib configuration is conditioned by the impeller's spiral airflow.

   The Examiner regarded as sufficiently structural Applicant's proposed amendment i) reciting impeller blades fixed to the rotor to form an impeller unit generating an axial airflow to which a rotational airflow component is imparted, whereby said impeller unit delivers a spiral airflow defining an airflow vector.

   The Examiner also regarded Applicant's proposed amendment ii) reciting rib groups intersecting at least one other rib group in intersection lines inclined at substantially the same angle as said airflow vector to be sufficient to distinguish over the prior art, *provided that* the original recitation that the ribs in cross section orthogonal to the rib lengthwise have "at least one side inclined at substantially the same angle as said airflow vector" be preserved. Applicant's proposed amendment ii) had deleted this recitation.

5) Having agreed that Applicant's proposed amendments appeared to distinguish the present invention over the references cited in the first and final Office actions in rejecting the claims, the Examiner reviewed the proposed amendments against the Kamada et al. and Somahara et al. patents, which were cited as pertinent but not primary references. The Examiner confirmed that the finalized language of the amendments would distinguish over Fig. 4 of Kamada et al.—particularly in that while the ribs

41 in Kamada et al. are inclined to the airflow, the line of intersection between the ribs 41 and 42 is not. The Examiner confirmed that the finalized language of the amendments would distinguish over Fig. 4 of Somahara et al.—particularly in that the angle α of the radial ribs 27 and the angle β of the annular ribs in Somahara et al. do not create rib groups intersecting other rib groups in intersection lines inclined at the angle of a spiral airflow vector. (Rather, as stated in the first paragraph of column 5 of Somahara et al., α approaches the angle at which the radial component of the velocity of air axially striking the rib is maximum, while according the next paragraph in column 5, β is an arbitrary angle determined to increase the velocity of the blown air leaving the ribs 28).

6) The outcome of the interview was that the proposed amendments to claim 1 (applied *mutatis mutandis* to claims 7 and 13, of course)—provided that they include the recitation concerning the inclined side of the ribs—would put the application in condition for allowance. Applicant's proposed amended claim 1.

Respectfully submitted,

June 8, 2006

/James Judge/

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